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10/558,152	11/23/2005	Masafumi Hirata	0033-1042PUS1	1878

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EXAMINER
SCOTT, RANDY A

ART UNIT	PAPER NUMBER
2453	

NOTIFICATION DATE	DELIVERY MODE
05/19/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>03 March 2011</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-17,33 and 34</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-17,33 and 34</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>23 November 2005</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>3/16/11</u>.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This Office Action is responsive to the communication filed 3/3/2011.

CLAIM STATUS

2.   Claims 1-4, 7-9, 11-14, and 33-34 have currently been amended.

Claim Rejections – 35 USC 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office Action:

> (a) A patent may not be obtained through the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1, 3-7, and 15 are under 35 U.S.C. 103(a) as being unpatentable over Abileah et al

(US 2002/0038336) in view of Gibbons et al (US 7,275,243), further in view of Tuatini (US

2001/0047385).

        Regarding claim 1, Abileah et al a connector obtaining unit responsive to the application

management unit determination of the existing connector so as to provide access to the existing

connector determined by the application management unit (see sec [0019], lines 25-30, which

discloses utilizing a transaction manager, running on an application server, to invoke connector

meta-models).

        Abileah et al fails to teach an application managing unit that analyzes application data to

determine an existing connector that specifies information indicating a function required for

executing said application and a function utilizing unit accessing a location of said function based on access information relating to the location described in information contained by said existing connector and utilizing said function specified by said existing connector.

Gibbons et al teach the specified deficiencies, including an application managing unit that analyzes application data to determine an existing connector that specifies information indicating a function required for executing said application (see col. 16, lines 15-20, which teaches a configuration manager and a configuration descriptor for specifying functionality required by an application).

It would have been obvious to one of ordinary skill in the art to combine Abileah et al with the concept illustrated by Gibbons et al, in order to successfully combine a metamodel used for description of application function language with a mechanism used to download functionality data regarding application data with the motivation of providing the benefit of teaching an improvement upon issuing transaction data based on required application specifics by implementing a application functionality descriptors within the provided data.

Abileah et al and Gibbons et al fail to teach a function utilizing unit accessing a location of said function based on access information relating to the location described in information contained by said connector and utilizing said function specified by said connector.

Tuatini teaches the specified deficiencies (see sec [0161], lines 16-22, which discloses locating stored access interface information based on service and function name, fig. 45, and sec [0165], lines 7-11, which discloses executing an accessible function of the service).

It would have been obvious to one of ordinary skill in the art to combine Abileah et al and Gibbons et al with the concept illustrated by Tuatini, in order to efficiently allow for

application interactivity with client devices with the motivation of providing the benefit of

teaching an improvement upon overseeing application component connections for client devices

by actively locating required application components and connectors to specify functions needed

to implement application executions.

       Regarding claim 3, Abileah et al discloses:

       Wherein said function utilizing unit obtains result from said function by passing at least

part of the information defined by said connector to said function specified by said connector

(see sec [0054], lines 9-11).

       Regarding claim 4, Abileah et al discloses:

       Wherein said connector includes data conversion information (see sec [0019], lines 6-10),

and said function utilizing unit converts data obtained from said application based on said data

conversion information (see sec [0111], lines 6-9), and passes the converted data to said function

(see sec [0111], lines 10-15).

       Regarding claim 5, Abileah et al discloses wherein said function utilizing unit converts a

result obtained from said function based on said data conversion information, and passes the

converted result to said application (see sec [0059], lines 14-16).

       Regarding claim 6, Abileah et al discloses wherein said application is an application

outputting the result obtained from said function, converted by said function utilizing unit and

passed from said function utilizing unit (see sec [0031], lines 3-6).

       Regarding claim 7, Abileah et al discloses:

A first connector determining unit comparing identification information unique to said application with identification information unique to said connector when executing said application (see fig. 7 and sec [0065], lines 1-3) and determining whether said function can be utilized using said connector or not (see sec [0079], lines 13-14).

Regarding claim 15, Abileah et al discloses:

An application obtaining unit obtaining said application (see fig. 2 and sec [0038]).

5.   Claims 8 and 13-14 are under 35 U.S.C. 103(a) as being unpatentable over Abileah et al (US 2002/0038336) in view of Gibbons et al (US 7,275,243) in view of Tuatini (US 2001/0047385), further in view of Schiller et al (US 2002/0007491).

Regarding claim 8, Abileah et al, Gibbons et al, and Tuatini fail to teach wherein said application includes unique information customized according to the service utilization terminal, said connector includes unique information customized according to the service utilization terminal, and said first connector determining unit compares identification information unique to said customized application with identification information unique to said connector, and determines whether said function can be determined or not, using said connector when said service utilization terminal executes said application.

Schiller et al teaches the specified deficiencies, including wherein said application includes unique information customized according to the service utilization terminal (see sec [0028], lines 1-3, "terminal ID"), said connector includes unique information customized according to the service utilization terminal (see sec [0028], lines 2-5), and said first connector

determining unit compares identification information unique to said customized application with

identification information unique to said connector (see sec [0028], lines 1-5), and determines

whether said function can be determined or not, using said connector when said service

utilization terminal executes said application (see sec [0028], lines 1-5).

It would have been obvious to one of ordinary skill in the art to combine Abileah et al,

Gibbons et al, and Tuatini with the general concept illustrated by Schiller et al, in order to

sufficiently match connectors with requested application data via connectors.

Regarding claim 13, Abileah et al discloses wherein a description of said application

includes a connector condition provided with an obtaining destination for obtaining said

connector (see sec [0043], lines 2-7) and at least one of information unique to said connector and

information relating to said function specified by said connector (see sec [0094], lines 2-5), and

said connector obtaining unit obtains a connector satisfying said connector condition

from said obtaining destination (see sec [0103], lines 1-4)

.

Regarding claim 14, Abileah et al discloses:

The terminal wherein said connector obtaining unit includes a connector selecting unit

selecting a predetermined connector from a plurality of different connectors as a connector to be

obtained by said connector obtaining unit when executing said application (see sec [0063], lines

5-7), and said function utilizing unit utilizes a function specified by said selected predetermined

connector among a plurality of different functions specified by said plurality of different

connectors (see sec [0065], lines 1-4).

6.   Claim 2 is under 35 U.S.C. 103(a) as being unpatentable over Abileah et al (US

2002/0038336) in view of Gibbons et al (US 7,275,243) in view of Tuatini (US 2001/0047385),

further in view of Sharma et al (US 6,976,061).

        Regarding claim 2, Abileah et al, Gibbons et al, and Tuatini fail to teach wherein said

access information relating to the location described in said connector is a URI (Uniform

Resource Identifier) for accessing said location.

        Sharma et al teaches the specified deficiencies (see col. 4, lines 12-14, which teaches a

URI for the resource adapter provided by the connector).

        It would have been obvious to one of ordinary skill in the art to combine Abileah et al

and Gibbons et al with the general concept illustrated by Sharma et al, in order to efficiently

issue resources to recipients based on required execution information with the motivation of

providing the benefit of transmitting services according to function requirements.

7.   Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abileah et al (US

2002/0038336) in view of Gibbons et al (US 7,275,243) in view of Tuatini (US 2001/0047385),

further in view of Trimberger et al (US 7,269,724).

        Regarding claim 9, Abileah et al, Gibbons et al, and Tuatini fail to teach wherein said

connector obtaining unit obtains the connector from a holding location in a different device by

accessing said holding location in said different device, and said service utilization terminal

further comprises a connector storing unit storing said connector obtained from said holding

location in said different device.

Trimberger et al teaches the specified deficiencies, including wherein said connector

obtaining unit obtains the connector from a holding location in a different device by accessing

said holding location in said different device (see col. 7, lines 18-20), and said service utilization

terminal further comprises a connector storing unit storing said connector obtained from said

holding location in said different device (see col. 8, lines 5-8).

It would have been obvious to one of ordinary skill in the art to combine Abileah et al,

Gibbons et al, and Tuatini with the general concept illustrated by Trimberger et al, in order to

successfully combine connectors with target terminals to provide for efficient application

execution on the devices.

8.   Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abileah et al (US

2002/0038336) in view of Gibbons et al (US 7,275,243) in view of Tuatini (US 2001/0047385),

further in view of Jarvensivu (US 2002/0188736).

With respect to claim 10, Abileah et al, Gibbons et al, and Tuatini fail to teach wherein

said application includes validity information including at least one of information relating to a

valid period of said application and a number of allowed operations of utilizing said application,

and said service utilization terminal further comprises an application determining unit referring

to said validity information and determining whether said application can be executed or not.

Jarvensivu teaches the general concept of wherein said application includes validity

information including at least one of information relating to a valid period of said application and

a number of allowed operations of utilizing said application (see sec [0039], lines 2-8, which

teaches accessing applications is based upon a predetermined period of time and access to certain

applications is provided), and said service utilization terminal further comprises an application

determining unit referring to said validity information and determining whether said application

can be executed or not (see sec [0044], lines 2-6, which teaches that application execution is

permitted based on payment and a determination at the decision block).

It would have been obvious to one of ordinary skill in the art to combine Abileah et al,

Gibbons et al, and Tuatini with the general concept illustrated by Jarvensivu, in order to

efficiently implement an application access system based on authorization.

9.   Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abileah et

al (US 2002/0038336) in view of Gibbons et al (US 7,275,243) in view of Tuatini (US

2001/0047385) and Jarvensivu (US 2002/0188736), further in view of Tanaka (US 5,845,069).

With respect to claim 11, Abileah et al, Gibbons et al, and Tuatini fail to teach wherein

said application includes validity information including at least one of information relating to a

valid period of said application and a number of allowed operations of utilizing said application,

and said service utilization terminal further comprises an application determining unit referring

to said validity information and determining whether said application can be executed or not.

Jarvensivu teaches the general concept of wherein said application includes validity

information including at least one of information relating to a valid period of said application and

a number of allowed operations of utilizing said application (see sec [0039], lines 2-8, which

teaches accessing applications is based upon a predetermined period of time and access to certain

applications is provided), and said service utilization terminal further comprises an application

determining unit referring to said validity information and determining whether said application

can be executed or not (see sec [0044], lines 2-6, which teaches that application execution is permitted based on payment and a determination at the decision block).

It would have been obvious to one of ordinary skill in the art to combine Abileah et al and Gibbons et al with the general concept illustrated by Jarvensivu, in order to efficiently implement an application access system based on authorization.

Abileah et al, Gibbons et al, Tuitani, and Jarvensivu fail to teach a second connector determining unit referring to said validity information when executing said application, and determining whether said function can be specified or not, using said connector.

Tanaka teaches the specified deficiencies, including a second connector determining unit referring to said validity information when executing said application, and determining whether said function can be specified or not, using said connector (see col. 23, lines 28-35, which teaches a second judging unit for determining if a command can be carried out).

It would have been obvious to one of ordinary skill in the art to combine Abileah et al, Gibbons et al, Tuitani, and Jarvensivu with the general concept illustrated by Tanaka, in order to efficiently implement a data accessing mechanism using connectors to fetch application information.

With respect to claim 12, Abileah et al, Gibbons et al, Tuitani, and Jarvensivu fail to teach wherein said connector obtaining unit obtains a new connector when said second connector determining unit determines that it is impossible to specify said function, using said connector.

Tanaka teaches the specified deficiencies (see col. 27, lines 37-41, which teaches that it is impossible for an unrightfully selected application to be selected).

It would have been obvious to one of ordinary skill in the art to combine Abileah et al,

Gibbons et al, Tuitani, and Jarvensivu with the general concept illustrated by Tanaka, in order to

efficiently implement a data accessing mechanism using connectors to fetch application

information.

10.   Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abileah et

al (US 2002/0038336) in view of Gibbons et al (US 7,275,243) in view of Tuatini (US

2001/0047385), further in view of Thompson (US 5,465,401).

With respect to claim 16, Abileah et al, Gibbons et al, and Tuatini fail to teach the service

utilization terminal being a mobile phone.

Thompson teaches the specified deficiencies (see col. 5, lines 20-24, "mobile

communication device" and col. 9, lines 20-25, "application connector").

It would have been obvious to one of ordinary skill in the art to combine Abileah et al,

Gibbons et al, and Tuatini with the general concept illustrated by Thompson, in order to

sufficiently maintain a communication system with the motivation of providing the benefit of

teaching an improvement upon application service provisioning by implementing the service

connection entity within a mobile device.

With respect to claim 17, Abileah et al, Gibbons et al, and Tuatini fail to teach the service

utilization terminal being a TV.

Thompson teaches the specified deficiencies (see col. 15, lines 23-25, "television").

It would have been obvious to one of ordinary skill in the art to combine Abileah et al,

Gibbons et al, and Tuatini with the general concept illustrated by Thompson, in order to

sufficiently issue service utilization data to a plurality of terminals with the motivation of using

application connectors in order to execute the terminal specific data.

11.   Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abileah et al (US

2002/0038336) in view of Gibbons et al (US 7,275,243), further in view of Tuatini (US

2001/0047385).

        With respect to claim 33, Abileah et al a connector obtaining unit responsive to the

application management unit determination of the existing connector so as to provide access to

the connector (see sec [0019], lines 25-30, which discloses utilizing a transaction manager,

running on an application server, to invoke connector meta-models).

        Abileah et al fails to teach an application managing unit that analyzes application data to

determine information indicating a function required for executing said application and a

function utilizing unit accessing a location of said function based on access information relating

to the location described in information contained by said existing connector and utilizing said

function specified by said existing connector.

        Gibbons et al teaches the specified deficiencies, including an application managing unit

that analyzes application data to determine information indicating a function required for

executing said application (see col. 16, lines 15-20, which teaches a configuration manager and a

configuration descriptor for specifying functionality required by an application).

It would have been obvious to one of ordinary skill in the art to combine Abileah et al with the concept illustrated by Gibbons et al, in order to successfully combine a metamodel used for description of application function language with a mechanism used to download functionality data regarding application data with the motivation of providing the benefit of teaching an improvement upon issuing transaction data based on required application specifics by implementing a application functionality descriptors within the provided data.

Abileah et al and Gibbons et al fail to teach a function utilizing unit accessing a location of said function based on access information relating to the location described in information contained by said connector, utilizing said function specified by said connector, an external function management unit responsive to the location of the required function being determined by the connector management unit to be an external location to the service utilization terminal to provide the required function from the external location so that the required function from the external location can be utilized; and an internal function management unit responsive to the location of the required function being determined by the connector management unit to be an internal location in the service utilization terminal to provide the required function from the internal location so that the required function provided from the internal location can be utilized.

Tuatini teaches the specified deficiencies, including a function utilizing unit accessing a location of said function based on access information relating to the location described in information contained by said connector, utilizing said function specified by said connector (see sec [0161], lines 16-22, which discloses locating stored access interface information based on service and function name, fig. 45, and sec [0165], lines 7-11, which discloses executing an

accessible function of the service), an external function management unit responsive to the

location of the required function being determined by the connector management unit to be an

external location to the service utilization terminal to provide the required function from the

external location so that the required function from the external location can be utilized (sec

[0117], lines 8-12, "external shared services"); and an internal function management unit

responsive to the location of the required function being determined by the connector

management unit to be an internal location in the service utilization terminal to provide the

required function from the internal location so that the required function provided from the

internal location can be utilized (see sec [0115], lines 1-7, "internal passthru component" and sec

[0130], lines 1-5, which discloses a transport connector and service adapter).

It would have been obvious to one of ordinary skill in the art to combine Abileah et al

and Gibbons et al with the general concept illustrated by Tuatini, in order to efficiently allow for

application interactivity with client devices with the motivation of providing the benefit of

teaching an improvement upon overseeing application component connections for client devices

by actively locating required application components and connectors to specify functions needed

to implement application executions.

12.   Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Abileah et al (US

2002/0038336) in view of Gibbons et al (US 7,275,243) and in view of Tuatini (US

2001/0047385), further in view of Mitchell et al (US 2004/0193731).

Regarding claim 34, Abileah et al and Gibbons et al fail to teach wherein said connector

obtaining unit obtains the connector from a holding location in a different device by accessing

said holding location in said different device, and said service utilization terminal further comprises a connector storing unit storing said connector obtained from said holding location in said different device.

Abileah et al, Gibbons et al, and Tuitini fail to teach wherein said connector obtaining unit obtains the connector from a holding location in a different device by accessing said holding location in said different device.

Mitchell et al teaches the specified deficiencies, including wherein said connector obtaining unit obtains the connector from a holding location in a different device by accessing said holding location in said different device (see sec [0021], lines 34-42, which discloses connector interfaces on multiple client devices or a hosting system), and said service utilization terminal further comprises a connector storing unit storing said connector obtained from said holding location in said different device (see sec [0019], lines 11-15, which discloses connector caches for client access).

It would have been obvious to one of ordinary skill in the art to combine Abileah et al, Gibbons et al, and Tuitini with the general concept illustrated by Mitchell et al, in order to successfully combine connectors with target terminals to provide for efficient application execution on the devices with the motivation of providing the benefit of teaching an improvement of application function provisioning by storing application data in an accessible repository.

13.   *Response to Arguments*

14.   Applicant's arguments filed on 3/3/11 have been fully considered and are not persuasive.

A.   In response to the applicant's argument that Abileah et al, hereinafter 'Abileah', fail to

teach or suggest a connector obtaining unit responsive to the application management unit

determination of the existing connector so as to provide access to the existing connector:

       According to par [0014], lines 1-6 of the applicant's specification, the term connector is

used regarding information specifying a function required for executing an application. The cited

Abileah reference, does not only disclose references to building or creating a connector, but also

discloses utilizing a transaction manager, running on an application server, to invoke connector

meta-models (see sec [0019] of Abileah, lines 25-30). The connectors discloses within Abileah

also perform synonymous functions as the connectors disclosed within the instant application,

see par [0053] of Abileah, which discloses that connectors are discloses, in this instance, to refer

to interfaces that store functions and parameters of a target platform. Fig. 7 and par [0065], lines

1-6 of Abileah, disclose a runtime connector with transformation capabilities for interfacing with

an existing application program. In this instance, the connector is utilized as a facilitator for the

transformation of meta-data to format application data into executable format.

B.   In response to the applicant's argument that Sakanishi (US 6,678,888) fails to teach or

suggest an application managing unit that analyzes application data to determine an existing

connector that specifies information indicating a function required for executing said application:

Due to the newly amended claim language, prior art reference Gibbons et al (US

7,275,243) has been cited, which discloses a configuration manager and a configuration

descriptor for specifying functionality required by an application (see col. 16 of Gibbons et al,

lines 15-20).

C.   In response to the applicant's argument that the limitation of "accessing a location of said

function based on access information relating to the location described in information contained

by said existing connector" was not explained regarding Tuatini (US 2001/0047385):

The executing of an accessible function of the service (disclosed in sec [0165], lines 7-11

of Tuatini) was mapped in regards to the term "access information" due to the fact that

components are provided within Tuatini regarding accessing function name data and accessing

interface information. See sec [0161], lines 16-26 of Tuatini, which discloses locating stored

access interface information based on service and function name and retrieving a transport

connector information for a function, which also drawn to the ideology of the instant application

in regards to using a connector to define application functionality.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Randy A. Scott whose telephone number is (571) 272-3797. The

examiner can normally be reached on Monday-Thursday 7:30 am-5:00 pm, second Fridays 7:30

am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Krista Zele can be reached on (571) 272-7288. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

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like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/RANDY A. SCOTT/

Examiner, Art Unit 2453

20110505

/Krista M. Zele/
Supervisory Patent Examiner, Art Unit 2453